Chabot College Professor of Physics & Anatomy Selected as a 2021 NASA Airborne Astronomy Ambassador

(Hayward, CA) - One of Chabot College's instructors will be among the very first community college educators to take part in a NASA-backed program that will launch him and 29 other educators into the very sky that they will be studying.

Scott Hildreth, a professor of astronomy and physics at Chabot College, was selected for the Airborne Astronomy Ambassadors (AAA) program, a program funded by NASA and implemented by Mountain View-based research non-profit, the Search for Extraterrestrial Intelligence (SETI) Institute. Previously for high school instructors only, Hildreth is among the first community college educators invited to participate. He said he has long-admired the program.

"I'm thrilled. I grew up watching the NASA stuff heading to the moon so I've been a fan for a long, long time. When the AAA program started ten years ago, I immediately started salivating and saying 'what a neat thing.' But it was only open to high school educators then," Hildreth said. "And, as luck would have it when they expanded this, you could say that I probably jumped up and figured out what I was going to say to the application almost immediately."

AAA is a professional development program for science teachers designed to improve science teaching and increase student learning and Science Technology Engineering and Mathematics (STEM) engagement. AAA teachers receive training in astrophysics and planetary science, including a week-long STEM immersion experience at a NASA astronomy research facility, the Stratospheric Observatory for Infrared Astronomy (SOFIA). The SOFIA is the biggest mobile observatory in the world and flies around the world to advance infrared science. Infrared radiation from space doesn't penetrate our atmosphere, but the Boeing 747 aircraft, flying at 40,000 ft. and above the clouds, can collect its data via a 100” telescope and suite of detectors, which allow astronomers and scientists to study hidden and obstructed objects and activities that would otherwise be inaccessible using just visible light.

After their training, the AAAs teach a physical science curriculum module created by the SETI Institute that connects curriculum concepts to NASA- and SOFIA-enabled research. Ambassador's classrooms have shown statistically significant improvements in performance and STEM engagement following their participation in the program, according to a consulting group hired by the SETI Institute.

Hildreth said he hopes to gain not only the experience that the AAA program has to offer but to be able to bring back the ability to inspire his students, particularly those who have been underrepresented, to pursue education and careers in STEM fields.

"Where do you go to see the population that NASA would like to see encouraged (to be more involved in science)? Hildreth said. "You go to the community college. Almost 50 percent of (Chabot's) students are first-generation college students, with nobody in their family who has a degree who would be encouraging them to pick up a science book. Just walking around a college can help set the idea that maybe you'll go there someday, or maybe your kids will go there someday. I think that's an enormous positive investment to say 'How do I change the equation of equity?'"

Chabot College currently houses a 30-foot planetarium which is equipped with a planetarium projector and seats about 50 students. When students are again able to attend in-person learning, the planetarium will be used for astronomy lecture and lab classes, and will be shared with other departments for its audio-visual capability.

Learn more about Chabot College's astronomy courses here: chabotcollege.edu/academics/science-math/astronomy.

To learn more about the Airborne Astronomy Ambassadors Program, visit seti.org/aaa.

About Chabot College

Chabot College, a comprehensive community college, opened its doors in Hayward more than 45 years ago to meet the needs of the East Bay's growing population. Today it remains the heart of a thriving, diverse community where students of all ages and backgrounds can get a high quality education at an affordable price. The college awards associate degrees and certificates, and specializes in university transfer, workforce training, and lifelong learning opportunities. 

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